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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/903,805	07/12/2001	Stephen Horace Tsiarkezos	XY-001	5855

7590 06/02/2003

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[REDACTED] EXAMINER

RHEE, JANE J

ART UNIT	PAPER NUMBER
1772	10

DATE MAILED: 06/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/903,805	TSIARKEZOS ET AL. <i>He</i>	
<b>Examiner</b>	<b>Art Unit</b>	Jane J Rhee	1772

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 13 May 2003.
- 2a) This action is FINAL.      2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-3,5 and 8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-3,5 and 8 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### Attachment(s)

- |  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ . |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)           | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ . | 6) <input type="checkbox"/> Other: _____ .                                   |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1,2 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Zafiroglu (4704321).

Zafiroglu discloses a stitchbonded fabric having a pattern of stitches formed by a multi-needle stitched set of stitching threads in a material (col. 2 lines 10-24), characterized in that the material comprises a non fibrous layer of polymer and at least one set of stitching threads comprises a contractile yarn (col. 2 line 24), the yarn having contracted the material to a length and/or width that is no greater than 90 percent of the original length and/or width of the material and the yarn comprising an elastic filament, a partially oriented synthetic organic polymeric fiber or textured yarn (table 1 lines 32-34, example 3). Zafiroglu discloses that the non fibrous layer is a polymeric film (col. 2 line 47). Zafiroglu discloses that the yarn contracted the material to a length and/or width that is in the range of 75-52 percent of the original length/or width of the material (table 1 lines 32-34, example 3).

2. Claims 1,2,5 are rejected under 35 U.S.C. 102(b) as being anticipated by Zafiroglu (5879779).

Zafiroglu discloses a stitchbonded fabric having a pattern of stitches formed by a multi-needle stitched set of stitching threads in a material (col. 2 lines 13-41), characterized in that the material comprises a non fibrous layer of polymer and at least one set of stitching threads comprises a contractible yarn (col. 5 line 66), the yarn having contracted the material to a length and/or width that is no greater than 90 percent of the original length and/or width of the material and the yarn comprising an elastic filament, a partially oriented synthetic organic polymeric fiber or textured yarn (col. 6 lines 58-62). Zafiroglu discloses that the non fibrous layer is a polymeric film (col. 3 line 37). Zafiroglu discloses that the non fibrous layer consists essentially of a polymeric coating and the coating is supported on a fibrous layer (col. 6 lines 17-21).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zafiroglu in view of Kourtides et al. (5038693).

Zafiroglu discloses the stitchbond fabric disclosed above. Zafiroglu fail to disclose that the non fibrous layer is a metal foil. Kourtides et al. teaches that the non fibrous layer is a metal foil (col. 4 line 19) for the purpose of providing a highly efficient

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insulation that provides a spacecraft thermal protection system that is significantly lighter in weight than systems using state of the art insulations (col. 4 lines 9-12).

Therefore, it would have been obvious to one having ordinary skill in the art at the time applicant's invention was made to provide Zafiroglu with the non fibrous layer that is a metal foil in order to provide a highly efficient insulation that provides a spacecraft thermal protection system that is significantly lighter in weight than systems using state of the art insulations (col. 4 lines 9-12) as taught by Kourtides et al.

***Response to Arguments***

Applicant's arguments with respect to claims 1,2,3,5,8 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jane J Rhee whose telephone number is 703-605-4959. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 703-308-4251. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

*Jane Rhee*

Jane Rhee  
May 28, 2003

*Harold Pyon*  
HAROLD PYON  
SUPERVISORY PATENT EXAMINER  
1772

5/30/03